ONYX-195X

Environment Test Report

Report NO: 09P020009

Issued by:	Rex-Chang	/	*04/22/2009*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*04/22/2009*
	Manager		**Date**

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Test Configuration:

Num	Item	Spec
1.	**Panel PC**:	ONYX-195X
	1. 19"LCD	AUO M190EG01 Vx
	2. Inverter	HWAYOUN QF132V.1.16
	3. Power Board	AAEON PER-T070 A1.2
	4. Power Supply	FSP FSP180-50MP
	5. MSM Module	ATI E2400
2.	CPU Board:	COM-945 A1.0-A
	1. Bios Ver.	ONYX-195 VER:1.3
	2.CPU	Intel T7200 / Core 2 Duo 2.0GHz
	3.Memory	DSL 1GB / ELPIDA E5108AJBG-6E (DDR II 667)
	4. SATA II HDD	Fujitsu MHZ2080BH / 80GB
	5.Test Software	Windows XP / Run PassMark Burn In Test 5.1 Pro

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Temperature rise test

Test Date: 04-09-2009

Test Product: ONYX-195X

Test Site: AAEON QA Internal Lab.

Test Standard: Reference EN 61131-2(94), UL508 (94)

Temperature Measurement:

40 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/13/08
Serial Number: 12A323190

Test Condition:

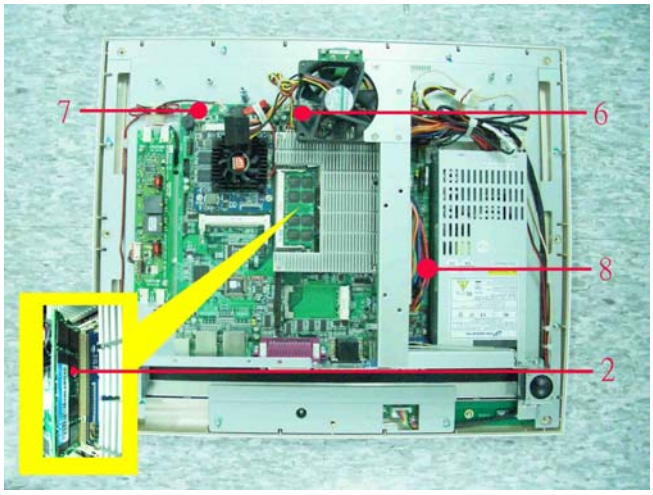
Ambient temperature: 40dC
Continuous running till thermal stability (within less than 1℃)

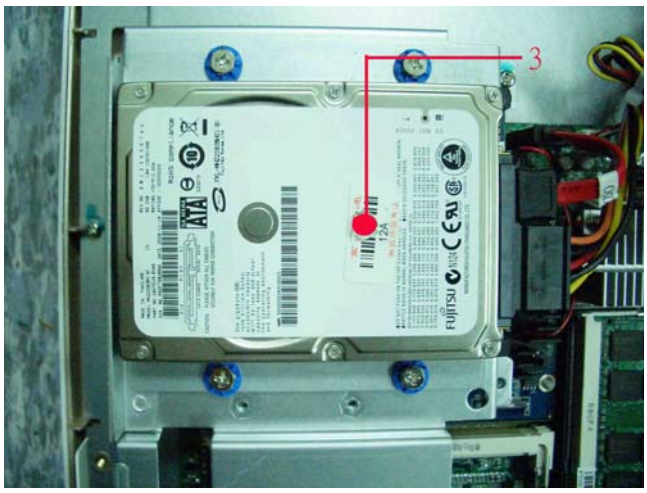
Test Software:

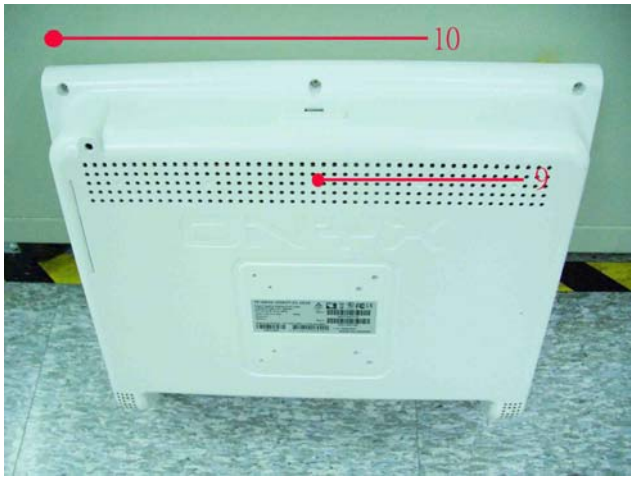
Windows XP / Run PassMark Burn In Test 5.1 Pro

Terminal Recorder:

Measuring Thermal Couple Position：







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Temperature rise test

Thermal profile data:

ONYX-195X

Point \ Temp. Stage(℃)	Spec	40	25
COM-945			
1. INTEL Core 2 Duo / 2.0GHz CPU	100	86.3	71.3
2. Memory	95	93.6	78.6
3. HDD	60	58.7	43.7
Inverter			
4. Q2	150	75.8	60.8
5. IC1	85	73.7	58.7
6. Control Box Inside Air Temperature - 1	N/A	57.3	42.3
7. Control Box Inside Air Temperature - 2 (MSM Module)	N/A	63.3	48.3
8. Control Box Inside Air Temperature - 3 (Power Supply)	N/A	55.2	40.2
9. Control Box External Surface	N/A	55.8	40.8
10. Chamber Air Temperature	N/A	40.1	25.1
Any Tm value showed in red words which meaning the value over the Tc degree C of this device specification.			

Sample Configuration & Quantity Under Test:

Quantity: 1 (ONYX-195X)

Test Result:

No problem was found during the temperature rise operation test.

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Temperature cycle test

Test Date: 04-10~12-2009

Test Product: ONYX-195X

Test Site: AAEON QA Internal Lab.

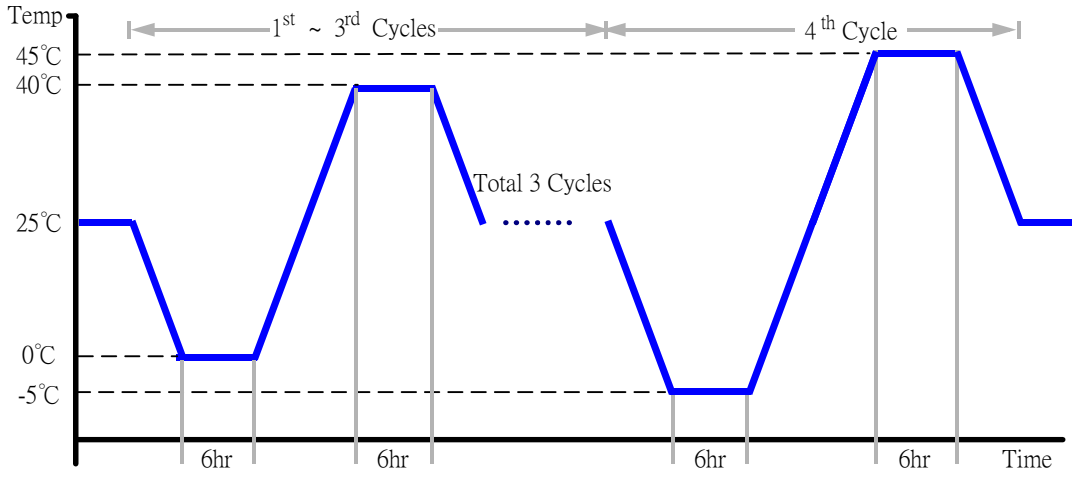
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/08
Serial Number: 3898

Test Condition:

1. Test Low Temperature: 0℃ (1~3 cycles)
   -5℃ (4th cycle)
2. Test High Temperature: 40℃ (1~3 cycles)
   45℃ (4th cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2℃/min
5. Test cycle: 4 cycles
6. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
7. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (ONYX-195X)

Test Result:

No problem was found during the temperature cycle operation test.

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High temperature storage test

Test Date: 04-12~14-2009

Test Product: ONYX-195X

Test Site: AAEON QA Internal Lab.

Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/08
Serial Number: 3898

Testing Item:

1. Test Temperature: 60℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (ONYX-195X)

Test Result:

No problem was found after the high temperature storage test.

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Low temperature storage test

Test Date: 04-14~16-2009

Test Product: ONYX-195X

Test Site: AAEON QA Internal Lab.

Test Standard: Reference IEC 68-2-1 Testing procedures
Test Ab: Cold Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/08
Serial Number: 3898

Testing Item:

1. Test Temperature: -20℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (ONYX-195X)

Test Result:
No problem was found after the low temperature storage test.

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Humidity test

Test Date: 04-16~19-2009

Test Product: ONYX-195X

Test Site: AAEON QA Internal Lab.

Test Standard: Reference IEC 68-2-3 Testing procedures
Test Ca: Damp heat, steady state (Non-operation)

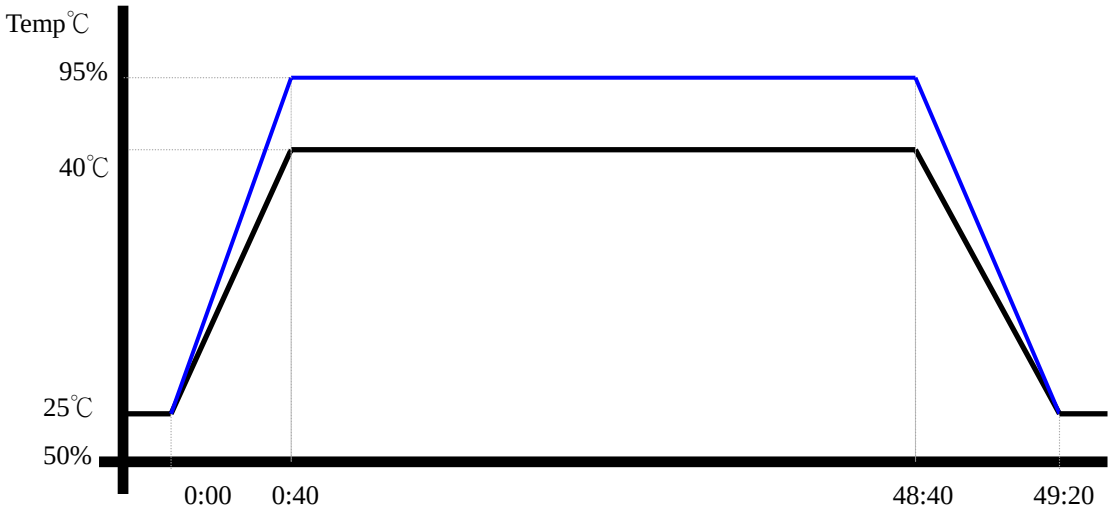
Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/08
Serial Number: 3898

Testing Item:

1. Test Temperature: 40℃
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
5. Test Environment Curve:

Humidity %



Sample Configuration & Quantity Under Test:
Quantity: 1 (ONYX-195X)

Test Result:

No problem was found after the humidity storage test.

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Cold start and hot start test

Test Date: 04-19~20-2009

Test Product: ONYX-195X

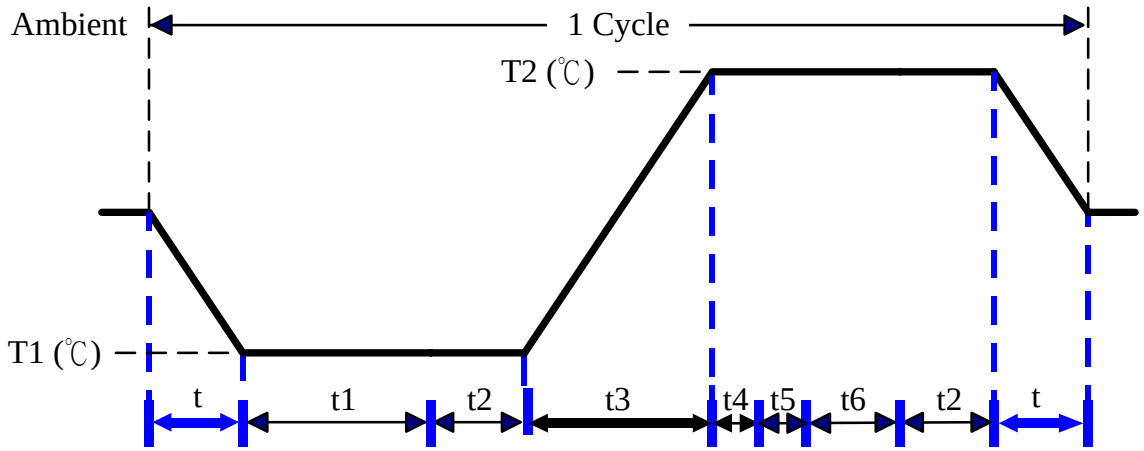
Test Site: AAEON QA Internal Lab.

Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/08
Serial Number: 3898

Test Condition:



Parameters	Description
T1	-5℃
T2	45℃
t1	4 hrs
t2, t6	2 hrs
t4, t5	1hrs
t, t3	2℃/min
n (Cycle)	1

t = temprature slope
t , t1, t6: Power Off
t2: Power on/off test 10 times (on 2 min / off 5min)
t3, t4: Run PassMark Burn In Test
t5: Win XP Software restart test 3 times
Test Software:Windows XP

Test Result:

a. No problem was found during the cold start test.
b. No problem was found during the hot start test.

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